CME Article

HIV Counseling and Testing in Pregnancy

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LEARNING OBJECTIVES

I. To understand New Jersey law mandating HIV counseling and voluntary HIV testing for all pregnant women as part of prenatal care.
II. To understand national recommendations for HIV counseling and screening of pregnant women in prenatal care and for women in labor with unknown or undocumented HIV status.
III. To identify barriers to universal HIV counseling and voluntary testing in the OB–GYN office and practical strategies to address these.
IV. To recognize issues of confidentiality and informed consent regarding HIV counseling and rapid expedited testing of women in labor with unknown or undocumented HIV status.

In 1994 the Pediatric AIDS Clinical Trials Group (PACTG) 076 demonstrated that a three-part zidovudine regimen could reduce perinatal HIV transmission by almost 70%.[1] Today, with antiretroviral therapy and obstetrical interventions, a woman who knows her HIV status early in pregnancy has a less than 2% chance of delivering an HIV-infected infant.[2] The American College of Obstetricians and Gynecologists (ACOG), the American Academy of Pediatrics (AAP), and other professional organizations have endorsed the Institute of Medicine (IOM) recommendation for routine universal prenatal HIV testing.[3,4] New Jersey law requires that women's health care providers counsel all pregnant women about HIV and offer voluntary testing with informed consent.[5]

The 2001 revised U.S. Public Health Service (USPHS) recommendations for HIV screening of pregnant women continue to recommend counseling, informed consent, and voluntary HIV testing as a routine part of prenatal care, but it emphasizes a simplified counseling process and more flexible consent.[6] In addition, the guidelines urge providers to strongly recommend HIV testing to all pregnant women, to address the reasons that a woman chooses not to be tested, and to offer counseling and rapid HIV testing to women who present at the time of labor and delivery.

A recent report from the Office of the Inspector General[7] that examined barriers to obstetricians' offering HIV testing to pregnant women and newborns estimated that in the year 2000, 80–110 HIV-infected infants were born to mothers who had not been diagnosed prior to giving birth. While the majority of obstetricians in the United States routinely offer prenatal HIV testing, 32 % identified barriers that prevent them from offering HIV testing to all patients. Among these are language, late entry to prenatal care, and physicians' perception that their population was at low risk for HIV.

Provider perception of a woman's risk of HIV infection has been shown to be inaccurate.[8] Many pregnant women believe that they are not at risk of HIV infection[9] and do not know about the benefits of treatment and interventions to prevent HIV transmission to their infants.[10,11] As a result, less than universal HIV counseling and testing continues to be a missed opportunity for the prevention of HIV infection in children.[7]

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DISCLOSURE STATEMENT: Elaine Gross, RN, MS, and Carolyn K. Burr, EDD, RN, have no relationships to disclose.

Strategies

Include HIV–prevention education as part of routine prenatal and gynecologic care

The best way to prevent HIV infection in children is to prevent HIV infection in women. Studies have shown that when given the information about HIV infection, the majority of women accept testing, particularly when it is recommended by their health care provider.[8] Education can be accomplished through brochures, posters, videotapes, group classes, or individual counseling.

Recommend HIV testing to all pregnant women

Many women do not know or believe that they are at risk of HIV infection. Risk-based testing is stigmatizing and identifies fewer women than routine voluntary testing of all pregnant women would[8]. Women are much more likely to accept HIV testing when it is recommended by their health care provider[9]. Providers are much more likely to counsel and recommend HIV testing to all women (rather than only those they believe to be at risk) when office policies to test all women are in place.[11]

Consider age, culture, education, and language

The best approach to ensure universal voluntary testing is to say in a respectful, matter-of-fact, and nonjudgmental manner: "I recommend the test to *all* my patients because it is important for your health and that of your baby." HIV education brochures related to testing and pregnancy are available in different languages and reading levels from state health departments and from ACOG.

Document counseling and the woman's consent for or against

In New Jersey, testing for HIV remains voluntary; however, both refusal and acceptance to be tested must be documented (see table 1). When a woman declines to be tested, the clinician should discuss her reasons for refusing and tell her she will be offered the opportunity for HIV testing at a later time. If a woman tests negative early in pregnancy but has clinical indications, such as a history of a sexually transmitted infection, multiple sex partners, sex partner(s) with HIV infection, or other risk behaviors, she should be tested again in the third trimester.[6]

Post-Test Counseling

HIV test results should always be given in person. Results of HIV testing, whether negative or positive, should be clearly documented in the patient's chart and included in the summary sent to the delivery hospital. Using the New Jersey state consent form for HIV testing in pregnancy is a simple way to document this content. The clinician needs to reassure the patient that the test result will be kept confidential, with the exception that it is communicated to the labor and delivery staff.

Negative results

Post-test counseling offers an opportunity to discuss and reinforce risk reduction strategies, including safer sex practices and the avoidance of exposure through substance misuse. Patients at high risk should be referred for further risk-reduction counseling and interventions. A negative HIV antibody test may not detect recent infection.

Positive results

Counseling a pregnant woman with a positive HIV test is stressful for both the patient and the provider. However, obstetricians are often faced with having to give difficult news to pregnant women about many conditions. HIV infection has a more hopeful outlook today, particularly regarding mother to child transmission. If pretest education stressed the positive reasons for a pregnant woman to get tested, the clinician can reinforce this message during post-test counseling.

The clinician should explain that a positive HIV test means that she has HIV infection, even though she may feel well and have no symptoms. The discussion should emphasize the importance of medi-

Table 1 Counceling and Consent

1. Hiv is the virus that causes aids and it is transmitted through unprotected sex, or through sharing of needles through injection drugs use.

2. A pregnant woman who has hiv can pass the virus to her baby before or during birth or by breast feeding. Women, especially, may not know they are at risk. Many women get hiv through heterosexual sex and are not aware that their partners have been at risk for hiv.

3. *Optional but important information*: New Jersey has one of the highest rates of hiv infection in women in the country.

4. There are important benefits for a woman to knowing whether she has hiv or not. Hiv is treatable. Treatment can prolong a woman's life and prevent transmission to her baby during pregnancy and birth.

5. Experts recommend that all pregnant women be tested for hiv regardless of whether a woman thinks she is at risk. If a woman is hiv positive, she can get treatment immediately. If she is hiv negative during pregnancy, she can learn ways to prevent getting the infection in the future.

6. All information about hiv testing and the results are kept confidential. In New Jersey, results are reported to the state Department of Health and Senior Services, where they are kept strictly confidential. Federal and state laws protect women with hiv from discrimination.

7. A woman has the right to refuse testing and she will not be denied care if she does so.[a]

[a] Nj Adm Code 8:61-3.1

cal treatment for maintaining and improving her own health and available interventions for her health and to reduce the risk of transmission to her fetus.[12,13]

The clinician will need to assess the patient's level of social support and whether she has someone with whom she can talk about being hiv positive during this difficult time. The clinician should also explain the need and options for partner testing and have available a list of community resources for hiv social support services and testing sites for partners and children. The clinician needs to inform the woman that positive hiv results are reportable in New Jersey and that results will be shared with the physician caring for her infant, stressing again that this information is otherwise kept confidential.

Offer Counseling and Testing in Labor if Hiv Status is Undocumented

Although universal hiv testing for all pregnant women is recommended, in practice, some women are not offered hiv testing, some do not accept testing, and others do not get prenatal care. As a result, pregnant women present in labor with their hiv serostatus unknown or unavailable to the labor and delivery staff. A review by the New Jersey Department of Health and Senior Services (njdhss) of infants in New Jersey born with hiv infection in 1999 and 2000, found that in seven of eight cases, the mother's hiv status was not known to the delivery team and in five of the cases the mother had received no or inadequate prenatal care.[14] A survey of northern New Jersey hospitals in high hiv seroprevalence counties found that none of the six delivery hospitals that responded routinely offered hiv counseling and testing during labor and only one had the capacity to offer rapid hiv testing. Nationally, an estimated 40% of infants with hiv infection were born to women who did not know their status prior to delivery.[7]

Based on these data, njdhss issued a standard of care in January 2002 recommending that any pregnant woman whose hiv status is unknown at the time of labor be offered hiv counseling and rapid or expedited hiv testing.[15] Based on the results of that testing, a pregnant woman found to be

HIV infected should be offered antiretroviral prophylaxis to reduce the risk of HIV transmission to her infant and should be provided with a referral for her continuing care.

Early and continuing antiretroviral prophylaxis is still the most effective approach in reducing perinatal HIV transmission.[6,2] However, antiretroviral intervention in labor and with the newborn can lower the risk of perinatal transmission to 10%.[16,17,18]

A woman who learns her HIV status during labor can reduce the risk of HIV transmission to her infant through antiretroviral prophylaxis and by not breastfeeding. The labor and delivery team can also avoid interventions that increase the risk of transmission such as rupture of membranes or use of scalp electrodes.

Counseling and Testing during Labor

Hiv counseling and testing during labor poses multiple challenges. Labor is clearly not the ideal time to be offering HIV education and counseling. The obstacles to effective counseling can be overcome, however, with a thoughtful and systematic approach. As a part of provider education initiatives to support the NJDHSS standard of care for rapid testing in labor, the National Pediatric and Family Hiv Resource Center developed a curriculum and a number of tools to assist clinicians.[19] The provider curriculum recommends a C^3R^3 approach to counseling during labor. The components include confidentiality, comfort, and consent, along with the reason for testing, rapid test results, and reduction of risk through treatment. The mnemonic helps clinicians to focus on critical elements of counseling during labor.

Confidentiality is essential in HIV counseling, in giving results, and in administering medication. Clinicians may need to employ specific strategies to ensure confidentiality, such as talking with the patient alone when offering testing and getting consent and assuring that medications given to reduce HIV transmission do not inadvertently disclose HIV status to family members.

Obtaining informed consent from the patient during labor is also a challenge. Informed consent is defined by ACOG as "an intentional and voluntary process that grants a clinician or researcher the authority to perform certain interventions."[20] Implicit in informed consent is the option of choosing not to participate.[6] In order for the consent to be "informed," the six elements described in table 1 must be included, according the CDC guidelines for counseling and testing in pregnancy.[6] They can be included in a concise but thorough "script" which is used by any clinician obtaining consent.

Assuring the patient's comfort, as much as possible, during the consent process is essential. The clinician will need to divide the counseling information into smaller sections that can be delivered between contractions. Information may need to be repeated to assure the patient understands.

Many patients will not be familiar with rapid HIV testing or the reason testing it is being requested. Until very recently, the only rapid HIV test FDA approved in the U.S. was the Single Use Diagnostic System (SUDS). This test is performed in the laboratory and can take 30 minutes to an hour or more to complete.[21] While sensitivity and specificity of SUDS are comparable to ELISA, the positive predictive value of the test varies with the prevalence of HIV in the population. Thus, the risk of false positives in low prevalence areas is high.

The OraQuick test received FDA approval in November 2002[22] as a laboratory test of moderate complexity and a waiver that will allow for the test to be performed in community sites. Since the test results can be learned within forty-five minutes, OraQuick should be especially useful in labor and delivery settings. OraQuick uses a whole blood sample from a finger stick. The sensitivity and specificity are at least as good as ELISA and, like SUDS, positive results must be confirmed with a Western Blot.

Whatever rapid test is used, the patient should be told how the test will be performed, when the results are expected, and that the test is a preliminary one that will need to be confirmed by another HIV test the results of which will not be known for a number of days. If the preliminary test is positive,

she will be offered treatment to reduce the risk of HIV transmission to her infant. She should also be told what that treatment would be. In some settings, women in labor are asked whether they would like to wait to receive the test result after the baby is born. If so, the consent for treatment is obtained at the same time as the consent for testing. In other settings, clinicians have found that women are anxious to receive test results and, if a woman's results are positive, she is asked for consent to treatment when the result of the rapid test is given.

Treatment to reduce the risk of perinatal HIV transmission during labor and delivery can include any of four choices detailed in the USPHS's "Guidelines to Reduce Perinatal HIV Transmission."[12] Choices include zidovudine (ZDV) given intravenously during labor; ZDV plus 3TC lamivudine, neviripine (NVP) taken orally; or a combination of ZDV and NVP given to the mother and either ZDV for six weeks, one dose of NVP, or a combination to the infant within the first 48 hours of life.

The woman who has received counseling and HIV testing during labor needs to be followed-up post-partum whatever her HIV test results. The absence of documented HIV testing during the prenatal period is frequently an indicator that the woman has had difficulty gaining effective access to the health care system.

If a woman's HIV test is negative, she will need counseling about HIV risk reduction and an assessment of any on-going HIV risk. If she is at high risk, from drug use or other risk behaviors, she should be referred for intensive HIV risk reduction assistance. The post-partum period provides an often-overlooked opportunity for HIV education and risk reduction. If a woman's HIV test is positive, she and her infant should be referred for continuing medical care to specialists in HIV care. She should also be referred for psychosocial care and care management. In many situations, HIV care providers, such as those in the New Jersey Family Centered Care Network, will visit the mother in the hospital or during the post-partum period to begin to establish a relationship with her.

The mother also needs to be educated about the newborn's health care needs. Many babies will be discharged on a six-week course of ZDV. Infants will also need diagnostic testing over the first few months of their lives in order to determine their HIV status. Every HIV exposed infant should be started on prophylaxis for PCP pneumonia at six weeks of age.

The United States has the opportunity to come close to eliminating perinatal transmission of HIV infection. HIV counseling and testing of pregnant women, including those whose HIV status is unknown in labor, will need to be universal if that difficult but reachable goal is to be achieved. *NJM*

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CME EXAMINATION: DEADLINE SEPTEMBER 30, 2004

"HIV Counseling and Testing in Pregnancy"

1. National recommendations for HIV testing of pregnant women can best be described as:
   A. Risk-based counseling and testing
   B. Routine counseling and targeted HIV testing for women at risk
   C. Universal counseling and voluntary HIV testing
   D. Voluntary counseling and testing

2. New Jersey law on HIV counseling and testing of pregnant women:
   A. Mandates HIV counseling and testing
   B. Mandates universal HIV testing
   C. Recommends HIV counseling and voluntary testing
   D. Requires HIV counseling for all pregnant women and voluntary testing

3. In New Jersey informed consent before HIV testing is:
   A. Mandated by state law
   B. Optional
   C. Required by federal law
   D. Unnecessary

4. Retesting for HIV in the third trimester is recommended for women with:
   A. A history of STDs
   B. Multiple sex partners
   C. All of the above
   D. None of the above

5. The New Jersey statewide standard of care recommends that HIV counseling and voluntary rapid/expedited testing be offered to:
   A. Women with no record of prenatal care
   B. Women who present in labor with unknown or undocumented HIV status
   C. Women who refused HIV testing during their prenatal care
   D. All of the above

Answer Sheet

"Hiv Counseling and Testing in Pregnancy"

Darken the correct answers

1. A B C D
2. A B C D
3. A B C D
4. A B C D
5. A B C D

Time spent reading this article and completing the learning assessment and evaluation: _____hours _____minutes

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